Assessment of General Education Learning Outcomes at a Community College

Assessment Institute – October 29th, 2024 Eric Wiesenauer & Casey Armour





Session Outline

- Background about Delta College
- How we do gen ed assessment
- Example data
- Impact on curriculum



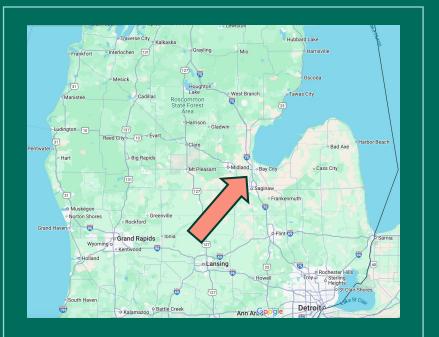
Background about Delta College



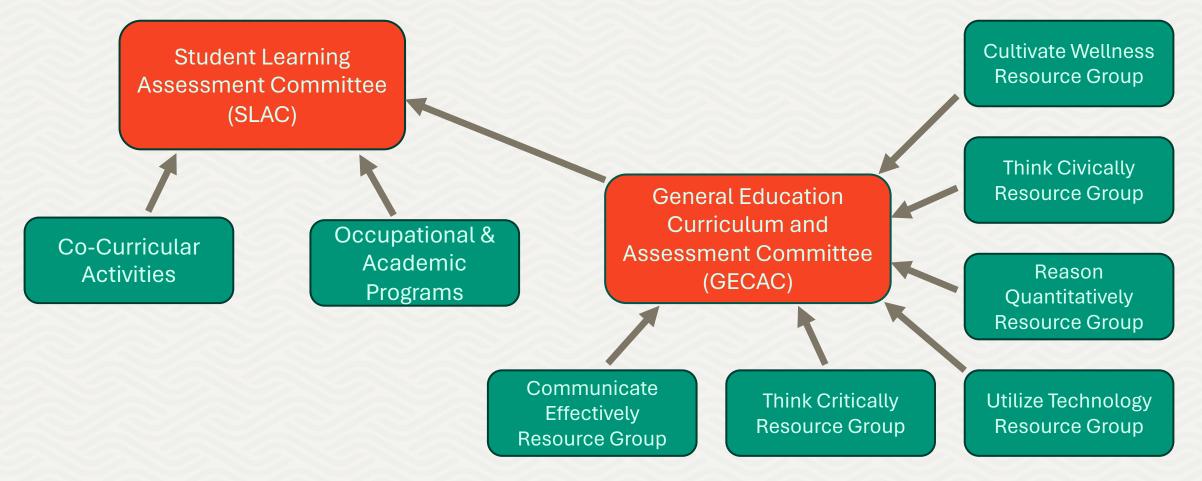
Delta College

- Community college in Mid-Michigan since 1961.
- Currently serving approximately 7,000 students each semester with over 50,000 graduates.
- Founding and current member of the League for Innovation, receiving the 2022-2023 Innovation of the Year award.
- The Aspen Institute recently identified Delta College as one of the nation's top 50 in its College Excellence Program.
- Accredited through the Higher Learning Commission.





Assessment Structure at Delta College





General Education Curriculum and Assessment Committee (GECAC)

- Oversees assessment of the six General Education Learning Outcomes (GELOs)
- Representatives from all five academic divisions, counseling, and administration
- Faculty chair
- Work in partnership with the resource groups for each GELO
- Reviews the Associate in Arts, Associate in Science, and Associate in General Studies degrees annually





GELO Resource Groups

- Faculty or staff who have an interest or expertise in a specific area of general education
- Faculty chair
- Scores samples of student work and compares with instructor scores
- Prepares and presents assessment report
- Makes recommendations to GECAC to improve student success and assessment process



Carla Murphy Cultivate Wellness



Christina Miller-Bellor Think Civically



Brad Pretzer Reason Quantitatively



Dennis Roebuck Utilize Technology Effectively



Marilyn Lemerand Jennifer Niester-Mika Communicate Effectively



Brian Aldrich Think Critically



How We Do Assessment

Outcomes and Curriculum Map
Timeline, rubric, and goals
Identifying students to assess
Data collection, analysis, and reporting
Closing the loop



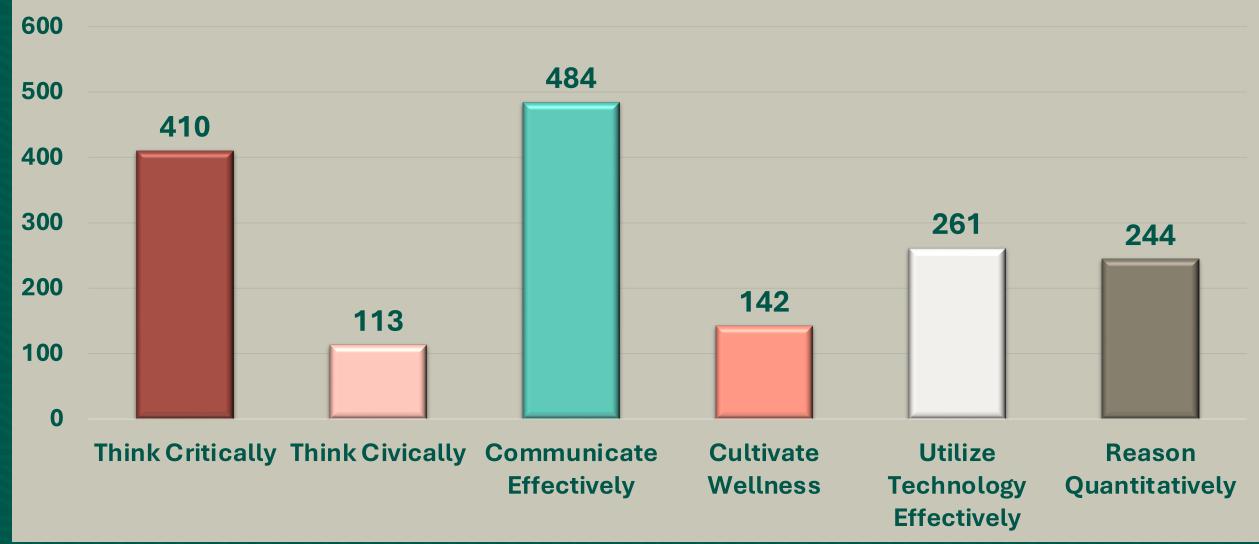
General Education Learning Outcomes (GELOs)

Think Critically	Produce a defensible conclusion or solution using critical or creative thinking.
Communicate Effectively	Communicate effectively in oral, written, or symbolic expression.
Think Civically	Demonstrate an understanding of diverse societies, ranging from local to global, in order to engage effectively in civic life.
Cultivate Wellness	Demonstrate an understanding of wellness principles to promote physical and personal health.
Utilize Technology Effectively	Solve a problem or accomplish a task using technology.
Reason Quantitatively	Use quantitative information or analyze data within context to arrive at meaningful results.



Curriculum Map

2023-2024 Gen Ed Audit Mastery Courses (1392 total)



Assessment Timeline

Cycle 3	Yea	ar 1	Yea	ar 2	Yea	ar 3	Year 4	
-	Fall	Winter	Fall	Winter	Fall	Winter	Fall	Winter
Schedule	2023	2024	2024	2025	2025	2026	2026	2027
Cultivate	Data	Analysis/	Implement			Plan	Data	Analysis/
Wellness	Collection	Reporting	Changes			Assessment	Collection	Reporting
Think	Plan	Data	Analysis/	Implement			Plan	Data
Civically	Assessment	Collection	Reporting	Changes			Assessment	Collection
Reason		Plan	Data	Analysis/	Implement			Plan
Quantitatively		Assessment	Collection	Reporting	Changes			Assessment
Utilize Technology			Plan	Data	Analysis/	Implement		
Effectively			Assessment	Collection	Reporting	Changes		
Think				Plan	Data	Analysis/	Implement	
Critically				Assessment	Collection	Reporting	Changes	
Communicate					Plan	Data	Analysis/	Implement
Effectively					Assessment	Collection	Reporting	Changes

Assessment Rubric and Goals

Level X:	Level 0:	Level 1:	Level 2:	Level 3:
Dropped	No Evidence	Emerging	Developing	Mastery
Student dropped before submission	Assignment not submitted	Does not meet expectations: has major errors, omissions, or inappropriate expressions	Meets minimal expectations: has minor errors, omissions, or inappropriate expressions	Shows proficiency in demonstrating the outcome

Cycle 1 (2017-2019): 70% of students will score at a 2 or 3 by their instructors
Cycle 2 (2020-2022): 80% of students will score at a 2 or 3 by their instructors
Cycle 3 (2023-2026): 80% of students will score at a 2 or 3 by their instructors



Identifying Students to Assess

Sample Size

- Request 300-1000 scores (depending on outcome)
- Request subsample of 150 to submit assignment

Students must meet assessment criteria.

- Having more than 45 credit hours (nearing graduation).
- Enrolled in classes with an M (Mastery) for the outcome.

Don't overload the faculty

- No more than 4 sections each
- No more than 30 students each
- Remove sections, not students
- Keep a diversity of courses





Data Collection

Spreadsheet emailed to faculty near the beginning of the semester

Return to Assessment Office by grade submission deadline

Includes the following:

- Score from rubric for each student
- Comments for each student
- Type of change made to course if any
- Description of change made

Original assignment for highlighted students

- 150 subsample
- Ungraded student work
- Assignment description and answer key

1) Choose the score that indicates at what level the student met the Think Civically outcome in this assignment (Rubric is shown							
 Return a copy of the following documents for each student whose name is <u>highlighted</u>. (Not every section has students chosen to have the assignment submitted.) 1) Assignment or test instructions for the submitted student work 2) Answer key for the submitted student work 3) Copy of the student work* that was assessed *If this assessment is embedded in a large project/assignment, please identify the area of the project/assignment that was assessed.							
Student Last Name	Proficiency Level in demonstrating the outcome Click in the cell to choose from the options	Qualitative Comments Describe errors, reasons for lack of proficiency in demonstrating the outcome, or other explanatory comments here.					
Assess	Level 0 No Evidence	No submission					
Scoreman	Level X Dropped Level 0 No Eviden Level 1 Emerging Level 2 Developin Level 3 Mastery						
	1) Choose the score below). 2) Provide Qualitati Return a copy of the f have the assignment 1) Assignment or t 2) Answer key for 3) Copy of the stud *If this assessm assessed. Student Last Name Assess	below). 2) Provide Qualitative Comments for all student Return a copy of the following documents for each have the assignment submitted.) 1) Assignment or test instructions for the submit 2) Answer key for the submitted student work 3) Copy of the student work* that was assesses *If this assessment is embedded in a large passessed. Proficiency Level in demonstrating the outcome Click in the cell to choose from the options Assess Level 0 No Evidence Scoreman Level X Dropped Level 1 Emerging Level 2 Developin					

Assessment Artifacts

- Collect assignments that faculty are already using in their courses
- Assignment should address all aspects of the outcome
- Assignments vary between classes, sections, and instructors
- Score based on assessment rubric, not assignment rubric

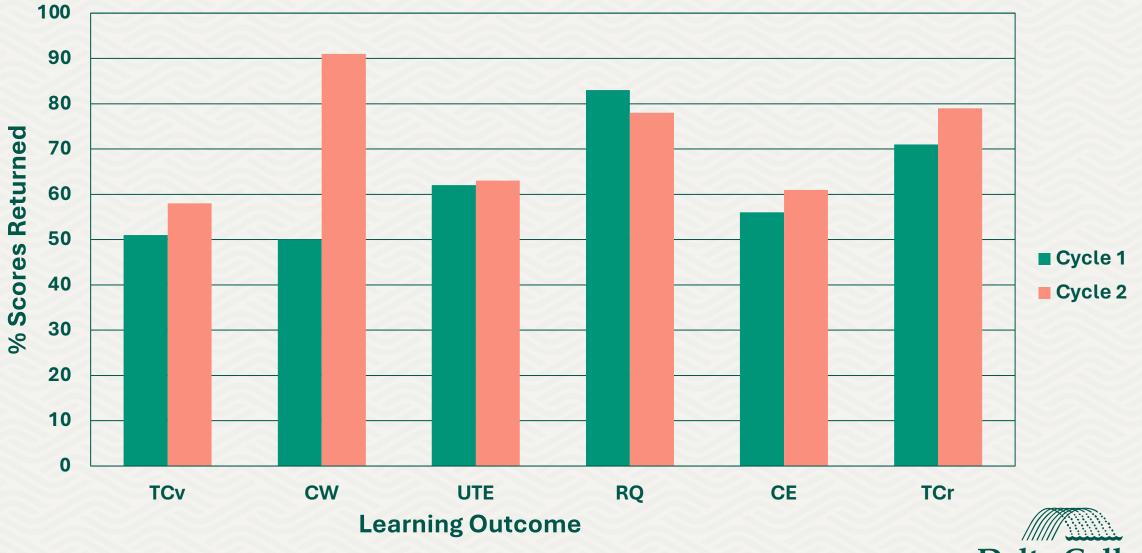
Activity **GELO** (course) Diet Reason Analysis (Fitness and Quantitatively Wellness) **Obesity** Reason Problem Quantitatively (College Algebra)

Assignment Description

Students collect calorie and nutrient information on all foods consumed for three days. They determine if their diet is in acceptable ranges and what they can do to improve.

Students determine the best algebraic model to represent obesity data for Americans and then construct that model. They use their model to estimate values not in the data set.

Return Rates



Delta College

Data Analysis and Reporting

- Assessment Office dumps data into a master Spreadsheet
- Resource group and GECAC score small sample
 - Organized by subject area in Microsoft Teams folders
 - Zoom breakout rooms
- Resource group chair presents findings at GECAC
- Presentations are stored on our eLearning site (D2L)
- GECAC chair inputs report into Outcome Assessment Tracking System (OATS) database



(GECAC) General Education Learning Outcome (GELO) Assessment GECAC



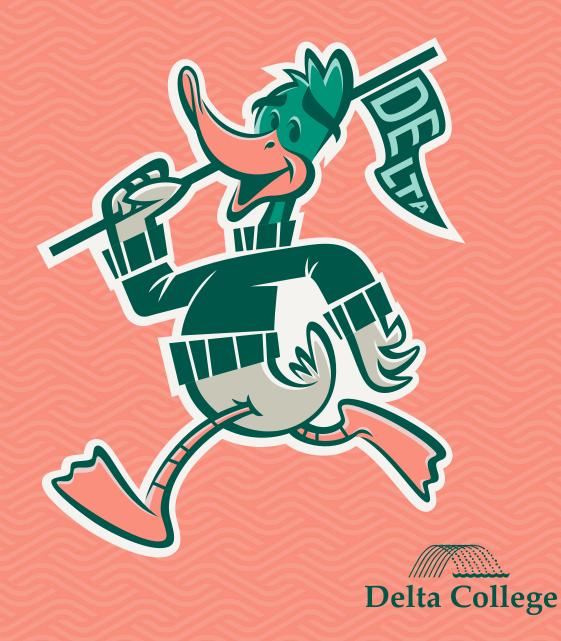
Improvements Resulting from Gen Ed Assessment – Closing the Loop!

- Student Learning Faculty make changes to courses based upon assessment.
- Assessment Process GECAC is constantly looking for ways to make the process of collecting, analyzing, and reporting data more efficient, consistent, and useful.
- College-Wide Curriculum and Policy GECAC reviews the transfer degrees (AA, AS, and AGS) on an annual basis.
- The GELOs are the program learning outcomes for each transfer pathways.



Example Data

Cultivate Wellness Collected Fall 2023



Sample Collection

Instructor Sample

- 302 students selected
- 205 scores returned
 - 20 students dropped
- 185 scores in large sample
- 68% return rate

Resource Group Sample

- 150 assignments requested
- 71 assignments returned
 - 6 assignments not scored
- 65 assignments in small sample
- 47% return rate



Instructor Sample

Instructor Scores (Large Sample with dropped students removed)

<u>Level</u>	<u>Number</u>	Percent
Level 0 No Evidence	29	16%
Level 1 Emerging	4	2%
Level 2 Developing	34	18%
Level 3 Mastery	118	64%
Total Rankings	185	100%

At 0 or 1	At 2 or 3
18%	82%

In the instructor sample, 82% of the scores were at the 2 and 3 levels, meeting the target goal of at least 80%.

Target met!

This data is used for external reporting.



Resource Group Sample

Instructor Scores							
<u>Level</u>	<u>Number</u>	Percent					
Level 0 No Evidence	1	2%					
Level 1 Emerging	2	3%					
Level 2 Developing	15	23%					
Level 3 Mastery	47	72%					
Total Rankings	65	100%					
% at a 2	95%						

	Resource Group Scores								
Le	evel	Number	Percent						
1	vel 0 No Ience								
	vel 1 erging	2	3%						
	vel 2 loping	16	25%						
	vel 3 stery	47	72%						
	otal kings	65	100%						
	% at a 2	97%							

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Comparison Differences

Summary

- Instructor & Resource Group agreed 77% of the time.
- +1 and -1 occurred the same number of times (11% each).
- Only one score differed by 2.
- 8% of the submitted artifacts could not be scored by the Resource Group.

Inst – Res Grp	Count	Percentage
0	50	77%
-1	7	11%
+1	7	11%
-2	1	2%
+2	0	0%
Total Scored	65	100%
Unscored	6	8%
Total Submitted	71	



Qualitative Comments

- Generally, instructors indicated that student responses for level 1 and 2 lacked detail, student failed to provide evidence to support a claim, or didn't answer question.
- Level 3 student work was described as reflecting on different dimensions of wellness and how they support their personal wellness. Research complete, thorough, detailed, and students provided evidence or multiple forms of support.
- Resource group review indicated that several submissions did not provide a clear rubric, or the assignment did not address the cultivate wellness outcome.



Demographic Breakdown

Cultivate Wellness FA23 All Students

						Non-	American	American	Graduate	Non	
Demo	White	Black	Hispanic	Multi	Unknown	Resident	American Asian	Native	(as of 5/24)	Graduate	То
n	133	23	14	6	6	1	1	1	48	137	18
%2&3	87%	61%	86%	67%	83%	0%	100%	0%	88%	80%	82
Significant?	Yes	Yes									
Demo	0-19	20-24	25-29	30-44	45 & OVER	М	F	Pell	No Pell	Total	
n	13	61	33	55	23	42	143	87	98	185	
%2&3	92%	84%	70%	82%	91%	83%	82%	78%	86%	82%	
Significant?			Yes								
							F		_		
Demo	AA	AAA	AS	AAS	AFA	AGS	ABS	Total			
n	13	3	14	8	1	8	4	48			
%2&3	77%	100%	93%	88%	100%	88%	100%	88%			
Significant?											

Significant with 2-prop Z-Test % 2 & 3 r goal of 8
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Next steps

Work on increasing sample size and return rate

- Discuss assessment with new faculty and adjuncts
- Update gen ed audit to increase classes with mastery
- Discuss adjusting credit cutoff (more than 45)
- 26 faculty submitted scores. The following are actions they took to improve student learning in sections they teach (n=58 sections):
 - Adjust grading rubric 2
 - Update course content 5
 - Change class assignment or activity 4
 - Continue to monitor 8
 - No change at this time 39



Impact on Curriculum



GELO Attainment by Graduates

- **Goal:** Identify where graduates are not completing courses with Mastery in a GELO
- Sample: All graduates of each degree (4969) for the last five academic years (FA '19 WN '24)
- Data: Number of credits completed with D- or better in courses with Mastery for each GELO
- Adjustment: Removed all students with credits transferred into Delta and removed all students with credits prior to Fall 2016
- Analyze: Percentage of graduates completing zero credits of Mastery

Sample Size:									
<u>V</u> ZZ	327	379	271	138	474	237	51	1877	
									11 0

Delta

Students with only Delta credits beginning in Fall 2016

Abbreviation	Outcome
TCR	Think Critically
TCI	Think Civically
CEF	Communicate Effectively
CUW	Cultivate Wellness
UTE	Utilize Technology Effectively
REQ	Reason Quantitatively

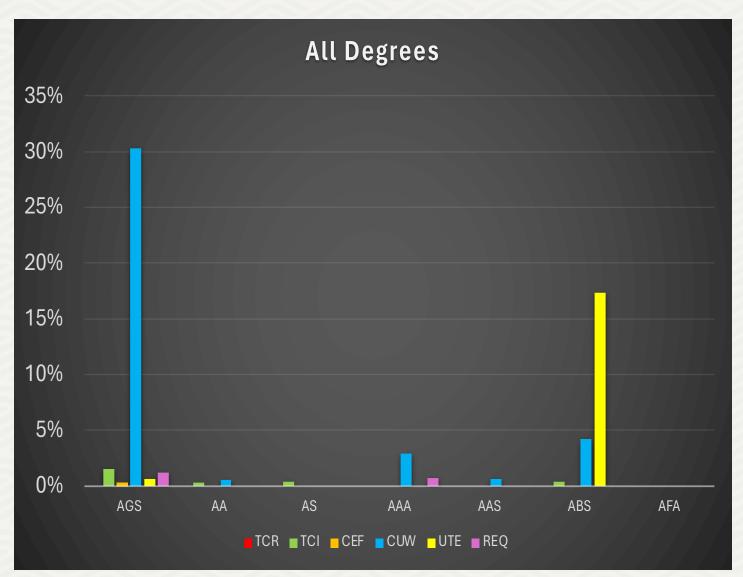
			All Gradı	uates		
35%						
30%						
25%						
20%						
15%						
10%				6.3%		
5%					2.3%	
0%	0.0%	0.4%	0.1%			0.3%
	TCR	TCI	CEF	CUW	UTE	REQ



7 degrees x 6 GELOs = 42

- 28 of 42 are 0%
- 8 of 42 between 0% and 1%
- 4 of 42 between 1% and 5%
- 2 of 42 above 5%

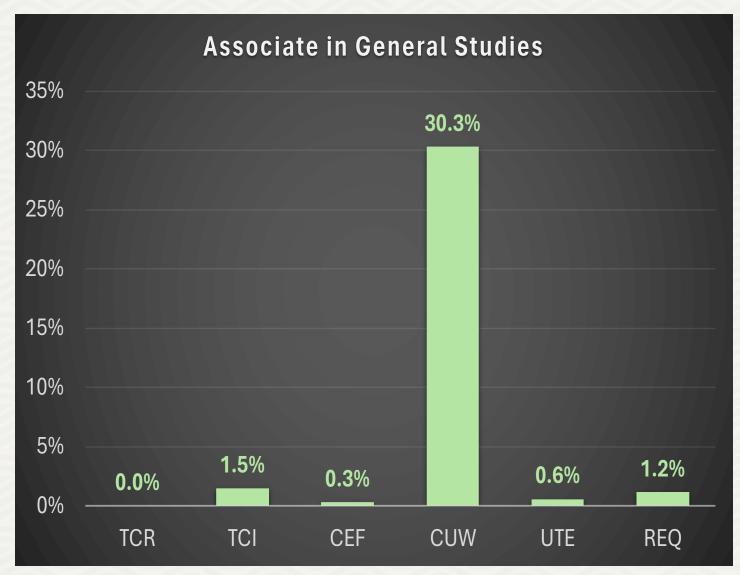
Abbreviation	Outcome
TCR	Think Critically
ТСІ	Think Civically
CEF	Communicate Effectively
CUW	Cultivate Wellness
UTE	Utilize Technology Effectively
REQ	Reason Quantitatively





99 of 327 graduates completed zero Mastery credits in CUW

Abbreviation	Outcome
TCR	Think Critically
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CUW	Cultivate Wellness
UTE	Utilize Technology Effectively
REQ	Reason Quantitatively

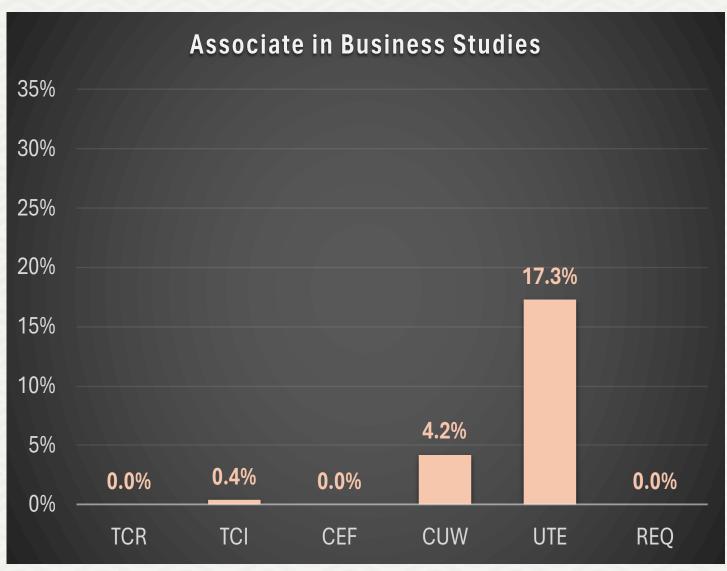




41 of 237 graduates completed zero Mastery credits in UTE

10 of 237 graduates completed zero Mastery credits in CUW – 8 of the 10 also earned an AGS

Abbreviation	Outcome
ADDIEVIATION	Oucome
TCR	Think Critically
ТСІ	Think Civically
CEF	Communicate Effectively
CUW	Cultivate Wellness
UTE	Utilize Technology Effectively
REQ	Reason Quantitatively







Thank You!

- Thank you for attending our session on General Education assessment!
- This work is vital to student success and our accreditation through the Higher Learning Commission.
- For more information, please contact:
 - <u>assessment@delta.edu</u>
 - ericwiesenauer@delta.edu
 - <u>caseyarmour@delta.edu</u>

